## **ENVIRONMENTAL CHEMISTS**

Date of Report: 12/11/00 Date Received: 11/22/00

Project: Metro Self Monitor, PO# M64857

Date Extracted: 12/07/00 Date Analyzed: 12/08/00

# RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Results Reported as mg/L (ppm)

Sample ID	Chromium	Copper	<u>Nickel</u>	<u>Zinc</u>
Laboratory ID				
M64857	1.5	1.9	2.0	0.09 fb
011154-01				
Method Blank	< 0.05	< 0.05	<0.05	$0.07 \ lc$

fb - The analyte indicated was found in the blank. Its presence may be due to laboratory contamination.

lc - The presence of the compound indicated is likely due to laboratory contamination.

## **ENVIRONMENTAL CHEMISTS**

Date of Report: 12/11/00 Date Received: 11/22/00

Project: Metro Self Monitor, PO# M64857

# QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 011182-01 (Duplicate)

	AND - 10 10 10 10 10 10 10 10 10 10 10 10 10	kali ni Muulini.		Relative	
MUMBEL HE	Reporting	Sample	Duplicate	Percent	Acceptance
Analyte	Units	Result	Result	Difference	Criteria
Chromium	mg/L (ppm)	0.86	0.93	8	0-20
Copper	mg/L (ppm)	1.4	1.3	7	0-20
Nickel	mg/L (ppm)	1.2	1.3	8	0-20
Zinc	mg/L (ppm)	0.19	0.14	a	0-20

Laboratory Code: 011182-01 (Matrix Spike)

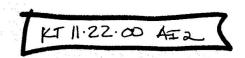
	Reporting	Spike	Sample	% Recover	y % Recovery	Acceptance	
Analyte	Units	Level	Result	MS	MSD	Criteria	RPD
Chromium	mg/L (ppm)	50	0.86	94	97	80-120	3
Copper	mg/L (ppm)	50	1.4	89	95	80-120	7
Nickel	mg/L (ppm)	100	1.2	92	91	80-120	1
Zinc	mg/L (ppm)	50	0.19	96	88	80-120	9

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recov	ery % Recov	ery Acceptan	ce	
_Analyte	Units	Level	LCS	LCSI	) Criteria	RPD	
Chromium	mg/L (ppm)	50	101	104	80-120	3	
Copper	mg/L (ppm)	50	107	107	80-120	0	
Nickel	mg/L (ppm)	100	100	103	80-120	3	
Zinc	mg/L (ppm)	50	107	107	80-120	0	

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282



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# SAMPLE CHAIN OF CUSTODY

Send Report To: Alaska Coppen Works Contact General A. Thompson.  Address 628 Harbore 50							
Address 628 HANSONE ST City, State, Zip Seattle 48 98/34							
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FORMS/CHECKIN/COC

11/08/00

### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

December 11, 2000

### **DUPLICATE COPY**

## **INVOICE #00ACU1211-1**

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M64857 - Results of testing requested by Gerry Thompson for material submitted on November 22, 2000.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc by Method 6010 @ \$80 per sample \$80.00

Amount Due \$80.00

FEDERAL TAX ID (b) (6)

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

December 11, 2000

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on November 22, 2000 from your Metro Self Monitor, PO# M64857 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kate Trafton Project Manager

Enclosures ACU1211R.DOC